Amendments

IN THE CLAIMS:

Please cancel Claims 10, 11, 14-18, 20-22 and 24.

Please amend the Claims as follows:

1. (Previously Canceled)

2. (Previously Canceled)

3. (Previously Canceled)

4. (Previously Canceled)

5. (Previously Canceled)

6. (Original) A storage medium having a plurality of tracks, the storage medium comprising:

a plurality of data sectors on each track; and

a plurality of servo sectors on each track, the number of servo sectors per track being greater than 200 servo sectors per track; each servo sector comprising a plurality of servo marks; and each servo sector having a gap, the gap having no servo marks, the length of gap being less than 7 servo clock cycles.

7. (Original) The storage medium of claim 6 wherein the number of servo sectors is greater than 1000 servo sectors per track.

8. (Original) The storage medium of claim 6 wherein the number of servo sectors is greater than 2000 servo sectors per track.

9. (Original) The storage medium of claim 6 wherein the length of the gap is less than 4 servo clock cycles.

10. (Canceled)

11. (Canceled)

12. (Currently Amended) A storage medium having a plurality of tracks, comprising:

a plurality of data sectors on each track; a plurality of servo sectors on each track;

each servo sector comprising a first location and a second location for a reset mark, wherein if the reset mark is located in the first location the reset mark has a first value, and if the reset mark is located in the second location the reset mark has a second value, and the values of reset marks of the plurality of servo sectors of a track represents a track number;

~~The storage medium of claim 10~~ wherein a first servo sector comprises: a first wobble bit, the center of the first wobble bit located between a first track and a second track, the second track being adjacent to the first track; and a second wobble bit, the center of the second wobble bit located between the second track and a third track, the third track being adjacent to the second track.

13. (Original) The storage medium of claim 12 wherein a second servo sector comprises: a third wobble bit, the center of the third wobble bit located proximate to the first track; and a

fourth wobble bit, the center of the fourth wobble bit located proximate to the second track, and the center of the fourth wobble bit offset circumferentially along the second track from the center of the third wobble bit.

14. (Canceled)

15. (Canceled)

16. (Canceled)

17. (Canceled)

18. (Canceled)

19. (Original) A disk drive for reading data from a storage medium having a plurality of tracks divided into a plurality of zones, each track having a track number encoded into the track, the disk drive comprising

a read head for reading data along a track and the track number of each track, the disk drive comprising:

a phase lock loop frequency generator that generates a first frequency derived from locking a servo signal from the storage medium;

a multiplying phase locked loop that multiplies the first frequency by a variable to derive a second frequency for use in reading data marks, the variable based upon the track number read by the disk drive; and

a reading device that uses the first frequency to read servo marks and the second frequency to read data marks.

20. (Canceled)

21. (Canceled)

22. (Canceled)

23. (Currently Amended) A method for aligning a reading device with a track of a storage medium, the storage medium having a first servo sector with a first set of wobble marks and a second servo sector with a second set of wobble marks, the method comprising:

reading a first signal from the second set of wobble marks in the second servo sector;

reading a second signal representing a location of the reading device with respect to the track, ~~The method of claim 20~~ wherein reading the second signal comprises reading the first signal from a first set of wobble marks in a first servo sector;

determining a third signal based on the first and second signal; and

repositioning the reading device based the third signal.

24. (Canceled)

25. (Currently Amended) The method of claim ~~20~~ 23 further comprising storing a plurality of the first signals as prior signals.

26. (Currently Amended) The method of claim ~~25~~ 23 wherein determining the third signal comprises determining the third signal based on a weighted average of the first and prior signals.

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